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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,864	01/24/2000	Allan L. Samson	5010/097	6357

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DUFT SETTER OLLILA & BORNSSEN LLC
2060 BROADWAY
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EXAMINER

SIMITOSKI, MICHAEL J

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/489,864

Applicant(s)

SAMSON ET AL.

Examiner

Michael J Simitoski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-913)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

NORMAN M. WRIGHT
PRIMARY EXAMINER

DETAILED ACTION

1. The amendment of 3/10/04 has been received and considered.

Information Disclosure Statement

2. The information disclosure statement filed 3/5/04 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 12, 23, & 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant is invited to point out where the limitation that the host signals a tamper condition in the signal conditioning circuitry was not disclosed in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 12, 23 & 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the host will *signal* a tampering condition *in the signal conditioning circuitry*. The specification states that the host itself signals the tamper condition, rather than the signal conditioning circuitry. *For the purposes of this Office Action, "signal a tampering condition in the signal conditioning circuitry" is believed to generally mean "signal a tampering condition indicating tampering has occurred in the signal conditioning circuitry"*.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 8, 9, 34-36, 41 and 43, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,388,690 to Lumsden. Lumsden discloses a system comprising signal conditioning circuitry/automatic meter-reading transponder with sensors (transponder scans alarm inputs) (see col. 1, lines 43-46), having a processor and memory, which stores current utility consumption data and transmits the data, along with identification information from its storage to a host system/central computer upon receiving instructions from the host system/central computer to do so (see col. 2, lines 17-38). Each

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particular signal conditioning circuitry/transponder is allotted a customer identification code upon initialization, after which the host/central computer begins requesting readings and storing data in memory. The host system/central computer scans each transponder periodically and receives authentication information (identification code and usage data) and from the transponder (see col. 2, lines 44-68, col. 3, lines 1-30 & col. 4, lines 44-59). The host/central computer monitors the readings of each transponder and if, for example, the client's usage is above a predefined peak level, the central computer can send a load shed command/alarm/tampering condition to the transponder (see col. 1, lines 10-42, col. 2, lines 17-38, col. 4, lines 44-67 and col. 5, line 1-6).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5 and 38, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden, as applied to claim 1 & 34 above, in view of U.S. Patent 5,014,038 to Leigh-Monstevens et al. (Leigh-Monstevens). Lumsden discloses a metering system as described above, but lacks terminating the operation of the system. Leigh-Monstevens teaches that in a vehicle intrusion detection system, it is advantageous to disable the starter circuit upon absence of a signal representative of a valid user of the vehicle to gain the benefit of an inexpensive method of preventing further theft (see col. 2, lines 57-66). Therefore, it would have

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been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to terminate distribution of a utility upon detecting of tampering so as to inexpensively prevent possible further theft, as taught by Leigh-Monstevens (see col. 2, lines 57-66). One of ordinary skill in the art would have been motivated to perform such a modification to inexpensively prevent possible further theft.

11. Claims 4, 10, 11, 37, 42 and 44, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden, as applied to claims 1 & 34 above, in view of U.S. Patent 6,289,456 to Kuo et al. (Kuo).

Regarding claims 4, 11, 37 and 44, Lumsden discloses a meter-reading system as described above, but lacks the permanent recording of information over time. Kuo teaches that creating a log, or record, of a change in state (indicating a possible intrusion) is beneficial because it creates a history that allows an indication of whether or not an administrator is aware of the event (see col. 4, lines 21-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to keep a history of authentication data read from the signal conditioning circuitry/transponder so an interested party is informed of all events that have occurred, as taught by Kuo (see col. 4, lines 21-27). One of ordinary skill in the art would have been motivated to perform such a modification so an interested party is informed of all events that have occurred.

Regarding claims 10 and 42, Lumsden discloses a system as modified above, but lacks including a time stamp in a record of information received. Kuo teaches that including a timestamp in a record of intrusions is beneficial because it allows an investigator to narrow a

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theft occurrence down to some specific time frame (see col. 2, lines 40-57). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to record a timestamp in the record of data read from the transponder to narrow down an intrusion to a specific time frame and hence reduce the number of possible suspects in a theft, as taught by Kuo (see col. 2, lines 40-57). One of ordinary skill in the art would have been motivated to perform such a modification to narrow down an intrusion to a specific time frame and hence reduce the number of possible suspects in a theft.

12. Claims 6 & 7, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden, as applied to claim 1 above, in view of U.S. Patent 4,933,668 to Oyer et al. (Oyer). Lumsden discloses a system that has an initial value to use for comparison (identification code and usage data) to a recorded value, as described above, but lacks the host/central system obtaining initial information from the remote unit. Oyer teaches performing an initial calibration in a security system where a central unit polls sensors to detect those currently connected to the system and to retrieve an initial value from each, stores the initial value and then later polls for a present value to determine if a difference in the present and initial values exists (see col. 3, lines 11-35). Oyer teaches that this calibration is beneficial because the system is reliable in varying conditions, which are to be seen by the system as normal, and because the system configuration can be altered, by authorized personnel, without major system modifications (see col. 1, lines 26-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to include an calibration step where initial values are collected to be later compared to readings, to

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gain the benefit of system performance in varying conditions and the simplistic, authorized changing of configuration, as taught by Oyer (see col. 1, lines 26-59 & col. 3, lines 11-35). One of ordinary skill in the art would have been motivated to perform such a modification to gain the benefit of system performance in varying conditions and the simplistic, authorized changing of configuration.

13. Claims 39 and 40, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Leigh-Monstevens et al., as applied to claim 38 above, in further view of Oyer et al. Claims 39 and 40 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 39 and 40 are rejected by a similar rationale.

14. Claims 12-14, 19-20, 23-25, 30 and 31, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 6,526,839 to Barger et al. (Barger) in further view of U.S. Patent 3,355,944 to Sipin.

Regarding claims 12 & 23, Lumsden discloses a meter system as modified above (substantially equivalent to that of claim 1), but lacks disclosure of meter electronics for a Coriolis flowmeter and lacks pick-off sensors affixed to the Coriolis flowmeter. However, Sipin teaches that Coriolis-type flowmeters are used because of their low resistance to flow and lack of moving parts (see col. 1, lines 1-31). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a Coriolis-type flowmeter because of their low resistance to flow and lack of moving parts, as taught by Sipin (see col. 1, lines 1-31). Sipin discloses one tube through which material flows (see Fig. 1), a driver (see Fig.

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6, element 82) affixed to the tube that vibrates the tube as the material flows through the tube (see Fig. 6, elements 57 & 58 & col. 6, lines 31-49) and sensors affixed to at least two different points of the tube indicating vibrations at of the tube at the two points (see Fig. 9, elements 83 & 84 & col. 7, lines 1-23). Sipin further discloses that the Coriolis type flowmeter uses the sensors to measure parameters/the mass flow of fluent matter (see col. 1, lines 8-11 & col. 1, liens 19-23). Lumsden, as modified, lacks pick-off sensors affixed to the Coriolis flowmeter. However, Barger teaches that “typical known devices use pick off sensors” (see col. 1, lines 57-67). The flowmeter measures mass flowing through a tube (see col. 5, lines 62-67 & col. 6, lines 1-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a Coriolis flowmeter, as taught by Sipin, and to use pick-off sensors, as taught by Barger, to measure flow in Lumsden’s metering system. One of ordinary skill in the art would have been motivated to perform such a modification to gain the benefits of Coriolis flometers’ lack of moving parts and low resistance to flow, as taught by Sipin and Barger. Regarding claims 13 and 24, the claims are substantially equivalent to claim 2. Therefore, claims 13 and 24 are rejected by a similar rationale (see Sipin, col. 1, lines 8-11 & col. 1, liens 19-23) and (see Barger, col. 1, lines 57-67).

Regarding claims 14 and 25, the claims are substantially equivalent to claim 3. Therefore, claims 14 and 25 are rejected by a similar rationale.

Regarding claims 19 and 30, the claims are substantially equivalent to claim 8. Therefore, claims 19 and 30 are rejected by a similar rationale.

Regarding claims 20 and 31, the claims are substantially equivalent to claim 9. Therefore, claims 20 and 31 are rejected by a similar rationale.

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15. Claims 16 and 27, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin, as applied to claims 12 & 23 above, in further view of Leigh-Monstevens. Claims 16 and 27 are substantially equivalent to claim 5 and are therefore rejected by a similar rationale.

16. Claims 15, 21, 22, 26, 32 and 33, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin, as applied to claims 12 & 23 above, in further view of Kuo et al.

Regarding claims 15 and 26, the claims are substantially equivalent to claim 4. Therefore, claims 15 and 26 are rejected by a similar rationale.

Regarding claims 21 and 32, the claims are substantially equivalent to claim 10. Therefore, claims 21 and 32 are rejected by a similar rationale.

Regarding claims 22 and 33, the claims are substantially equivalent to claim 11. Therefore, claims 22 and 33 are rejected under similar rationale.

17. Claims 17 and 18, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin in view of Leigh-Monstevens, as applied to claim 16 above, in further view of Oyer. Claims 17 and 18 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 17 and 18 are rejected by a similar rationale.

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18. Claims 28 and 29, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin, as applied to claim 23 above, in further view of Oyer. Claims 28 and 29 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 28 and 29 are rejected by a similar rationale.

Response to Arguments

19. Applicant's arguments filed 3/10/04 have been fully considered but they are not persuasive.

In response to applicant's arguments on page 13, ¶2:

Lumsden discloses periodically transmitting a request for authentication information/specific information (col. 2, lines 17-24) and receiving authentication information/specific information in response (col. 2, lines 17-24 & col. 3, lines 9-31) and comparing authentication information/specific information with initial information (col. 4, lines 35-59). Lumsden discloses a load shed instruction/alarm/condition, but lacks specifically signaling a "tampering condition" in response to the information not being equal to the initial information. However, the word "tampering" suggests tinkering (American Heritage College Dictionary), where a change is made in whatever is being tampered (such as a change in configuration). As Lumsden's system sends a load shed instruction upon current usage exceeding preferred usage/initial condition, the load shed instruction can in fact be a tampering condition.

Further, Lumsden's lack of the terms "tamper", "authenticate" or "calibrate" are given little patentable weight as these terms only present specific *uses* of the invention, as claimed thus

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far. For instance, if two references cite the comparison of one data to another to detect a change, it is irrelevant whether the change signifies a “tampering”, a change in time, etc. – what is relevant is that a change has been detected between the two pieces of data (through active method steps, system means, etc.).

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. The '385 reference is cited for teaching a host system/monitoring station periodically transmitting a request for authentication information/status, etc. from signal

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conditioning circuitry/ATM network device and in response to said request, comparing said authentication information/status, etc. with initial information/previous information (see col. 1).

b. The '180 reference is cited for teaching fault detection in a Coriolis Mass flowmeter apparatus (by comparison of previous/known configuration to current conditions) and sending an alarm based on the detection of a possible fault (ABSTRACT).

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (703)305-8191. The examiner can normally be reached on Monday - Thursday, 6:45 a.m. - 4:15 p.m.. The examiner can also be reached on alternate Fridays from 6:45 a.m. - 3:15 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703)308-4789.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

Or faxed to:

(703)746-7239 (for formal communications intended for entry)

Or:

(703)746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

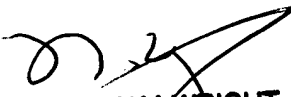
Information regarding the status of an application may be obtained from the Patent

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MJS
April 25, 2004


NORMAN M. WRIGHT
PRIMARY EXAMINER